In the Claims:

1. (Currently Amended) A <u>computer implementing a</u> virtual object for use in a virtual environment, the virtual object comprising at least a visible appearance element, and an <u>object</u> internal coordinate system supporting <u>natural language</u> positional commands in relation to said virtual object, said commands being for automatic, command based positioning within said virtual environment with respect to said virtual object, and having at least one docking location defined within said internal coordinate system, said docking position being defined for at least one of another object and an object type as a default location when said another object or object type is brought into association with said virtual object.

2. (Currently Amended) A <u>computer implementing a</u> virtual object as claimed in claim 1, wherein said internal co-ordinate system comprises unit lengths defined in terms of dimensions of a bounding shape of said virtual object.

3. (Currently Amended) A <u>computer implementing a</u> virtual object according to claim 1, wherein said internal co-ordinate system is any one of a group comprising: a polar coordinate system, a Cartesian coordinate system, a cylindrical coordinate system, a tetragonal coordinate system, and hexagonal coordinate system.

4. (Currently Amended) A <u>computer implementing a</u> virtual object as claimed in claim 2, wherein said bounding shape has a width, a height and a depth, and said internal coordinate system comprises axes having a fixed direction with respect to directions of said width, height and depth.

5. (Currently Amended) A <u>computer implementing a</u> virtual object as claimed in claim 3, movable to positions, in said virtual environment, express able in terms of said width, said height and said depth.

6. (Currently Amended) A <u>computer implementing a</u> virtual object as claimed in claim 5, wherewith said expressions of said locations comprise natural language description for each direction.

7. (Currently Amended) A <u>computer implementing a</u> virtual object as claimed in claim 6, where said natural language descriptions are selected from a group comprising left, leftwards, port, right, rightwards, starboard, up, upwards, above, down, downwards, below, forwards, near, ventral, fore, backwards, aft, dorsal, North, Northwards, Northerly, South, Southwards, Southerly, East, Eastwards, Easterly, West, Westwards, Westerly, North-Easterly, North-Westerly, South-Easterly, South-Westerly, and synonyms, combinations and translations thereof.

8. (Currently Amended) A <u>computer implementing a</u> virtual object as claimed in claim 6, arrangeable in terms of said expressions.

9. (Cancelled).

10.   (Currently Amended) A <u>computer implementing a</u> virtual object as claimed in claim 4, where said location is a preferred position for repositioning said virtual object.

11.   (Currently Amended) A <u>computer implementing a</u> virtual object as claimed in claim 4, wherein said docking position is defined such that said virtual object and said other virtual object are logically displayed according to positioning logic associated with said virtual environment.

12.   (Currently Amended) A <u>computer implementing a</u> virtual object as claimed in claim 11, wherein said designated location associated therewith is compatible with an unrestricted range of objects.

13.   (Currently Amended) A <u>computer implementing a</u> virtual object as in claim 11, wherein said designated position associated therewith for selective positioning of a second object thereat is selectively compatible with a subset of objects.

14.   (Currently Amended) A <u>computer imlementing a</u> virtual environment for user interaction, <u>the environment</u> comprising at least a first virtual object and a second virtual object and at least a relationship between them, wherein said relationship is selectable to specify, using a<u>an object internal coordinate system supported</u> <u>natural</u> <u>language</u> positioning ~~language~~ command, an action of said second object and said relationship is defaulted according to at least one of said first virtual object, said

second virtual object, a type of said first virtual object and a type of said second virtual object.

15.   (Currently Amended) A <u>computer implementing a </u>virtual environment as claimed in claim 14, wherein said relationship between said first virtual object and said second virtual object is any one of a group comprising a positioning relationship, a rotation, a deletion, a translation, a scaling operation, an animation activation, a change of color, a change of texture, a change in a status of the object, selection of the object from an object family, and change of object parameters.

16.   (Currently Amended) A <u>computer</u> ~~embodied~~ <u>implementing a </u>three dimensional virtual environment comprising at least one three dimensional virtual object and having a series of potential relationships of said virtual object with a relating other virtual object, each said relationship comprising a default relative position selected according to at least one of said relating other object and a type of said relating other object, said object having a tool tip facility and being selectable to display a tooltip, via said tooltip facility, said tooltip indicating at least some of said potential relationships, for interaction therewith in said virtual three dimensional environment via positioning commands of <u>a</u>~~an~~ ~~positioning~~ object internal co-ordinate system <u>supported-natural</u> language, thereby to apply said default relative position by selection of one of said potential relationships.

17.   (Currently Amended) A <u>computer implementing a </u>three dimensional virtual environment virtual object as claimed in claim 16, <u>wherein said three dimensional</u> <u>virtual object</u> ~~having~~<u>has </u>a bounding shape, wherein said bounding shape has a width,

a height and a depth, and said internal coordinate system comprises axes having a fixed direction with respect to directions of said width, height and depth.

18.   (Currently Amended) A computer implementing a virtual environment according to claim 16, wherein said indicated relationships are selectable from said tooltip.

19.   (Currently Amended) A computer implementing a virtual environment as claimed in claim 16, wherein said tooltip is displayable automatically upon a cursor passing over said virtual object.

20.   (Currently Amended) A computer implementing a virtual environment according to claim 16, wherein potential relationships are associated with parts of said object for display with said tooltip upon selection of said object part.

21.   (Currently Amended) A computer implementing a virtual environment according to claim 16, wherein said relationship is a relationship with another object in said environment.

22.   (Currently Amended) A computer implementing a virtual environment as claimed in claim 16, wherein said relationship is a positioning relationship via a predetermined preferential location associated with said second virtual object.

23. (Currently Amended) A <u>computer implementing a</u> virtual environment as claimed in claim 22, wherein said predetermined preferential location has a specific nature, selectively accepting predetermined types of objects.

24. (Currently Amended) A <u>computer implementing a</u> virtual environment as claimed in claim 16, which is common to a plurality of users.

25. (Currently Amended) A <u>computer implementing a</u> virtual environment as claimed in claim 24, wherein an interaction by a first user is detectable by at least a second user.

26. (Currently Amended) A <u>computer implementing a</u> virtual environment as claimed in claim 24, wherein an interaction by a first user is not detectable by at least a second user.

27. (Currently Amended) A <u>computer implementing a</u> virtual environment as claimed in claim 16, where said first object comprises at least a visible appearance element, and an internal coordinate system.

28. (Currently Amended) A <u>computer implementing a</u> virtual environment as claimed in claim 16, wherein said associated coordinate system is selected from a polar coordinate system, a Cartesian coordinate system, a cylindrical coordinate system, a tetragonal coordinate system, and hexagonal coordinate system.

29.   (Currently Amended) A <u>computer implementing a </u>virtual environment as claimed in claim 16, wherein said virtual object further comprises a bounding shape having a width, a height and a depth, and said associated coordinate system has axes having a fixed direction with respect to directions of said width, height and depth.

30.   (Currently Amended) A <u>computer implementing a </u>virtual environment as claimed in claim 29, wherewith locations in the vicinity of said object, are expressible in terms of said width, said height and said depth.

31.   (Currently Amended) A <u>computer implementing a </u>virtual environment as claimed in claim 30, wherein said expressions of said locations comprise units for each direction with respect to a corresponding dimension of said boundary box.

32.   (Currently Amended) A <u>computer implementing a </u>virtual environment as claimed in claim 30, wherein said expressions of said locations comprise natural language descriptions for each direction.

33.   (Currently Amended) A <u>computer implementing a </u>virtual environment as claimed in claim 32, where said natural language descriptions are selected from a group comprising left, leftwards, port, right, rightwards, starboard, up, upwards, above, down, downwards, below, forwards, near, ventral, fore, backwards, aft, dorsal, North, Northwards, Northerly, South, Southwards, Southerly, East, Eastwards, Easterly, West, Westwards, Westerly, and synonyms, combinations and translations thereof.

34.   (Currently Amended) A <u>computer implementing a </u>virtual environment as claimed in claim 30, wherein said location is a preferred position for positioning other objects thereat.

35.   (Currently Amended) A <u>computer implementing a </u>virtual environment according to claim 32, wherein at least one virtual object is selectable according to a query expressed using said natural language descriptions.

36.   (Currently Amended) A <u>computer implementing a </u>virtual environment according to claim 32, wherein at least one virtual object is arrangeable according to a query expressed using said natural language descriptions.

37.   (Currently Amended) A <u>computer implementing a </u>virtual environment as claimed in claim 16, wherein said first virtual object has a designated location associated therewith for selective positioning of a second object thereat, so that first virtual object and second virtual object are logically displayed according to positioning logic associated with said virtual environment.

38.   (Currently Amended) A <u>computer implementing a </u>virtual environment as claimed in claim 37, wherein said first virtual object has a designated location associated therewith for selective positioning of a second object thereat, where said designated location is compatible with any object.

39.   (Currently Amended) A <u>computer implementing a </u>virtual environment as claimed in claim 38, wherein said designated location associated therewith for

selective positioning of a second object thereat is selectively compatible with a subset of objects.

40.   (Currently Amended) A method, to be performed on a computer, for moving a first virtual object from a first position to a selected second position associated with a second virtual object, within a virtual environment, each virtual object being approximated by a bounding box and having a respective internal co-ordinate system, the method comprising:

selecting said first virtual object,

defining a move of said first virtual object into proximity of said second virtual object using said first virtual object internal co-ordinate system, and a positioning command in a positioning natural language, said natural language providing commands relating to the respective internal coordinate system of said first virtual object-,

operatively associating said first virtual object with said second virtual object, and thereby automatically positioning said first virtual object with respect to said second virtual object in terms of said first virtual object internal co-ordinate system of said first virtual object into a docking position, said docking position being a default position defined   according to at least one of a first group comprising said first virtual object and a type of said first virtual object and at least one of a second group comprising said second virtual object and a type of said second virtual object.

41.   (Original) A method according to claim 40, further comprising automatically adjusting positioning of said first object with respect to said second object so that said first object and said second object are logically displayed.

42.   (Original) A method according to claim 37, wherein said automatic adjustment comprises associating said first object with a predetermined position on said second object and repositioning said first object to locate onto said predetermined position.

43.   (Currently Amended) A method, to be performed on a computer, for constructing a menu of available and permitted user interactions with a first object having at least one user definable relationship within a virtual environment which supports the default relative positioning between two virtual objects, said method comprising:

automatically constructing a list of a priori user interactions characteristic of said first object and ;

automatically adapting said list of user interactions by addition of a further list of optional interactions that characterize the at least one user definable relationship with a second object; and

automatically providing said list as a menu, to be invoked by interacting with one of said virtual objects thereby to create a series of available default positioning commands, in an object internal co-ordinate system supported natural language, for said first object in relation to a second said object.

44.   (Currently Amended) A method, to be performed on a computer, for constructing a menu of available and permitted user interactions with a first object having at least one user definable relationship within a virtual environment as claimed in claim 40, said method further comprising automaically displaying said menu to user.

45. (Original) A method as claimed in claim 43, wherein said menu is displayable by locating a cursor over said virtual object.

46. (Currently Amended) ~~Within a~~ A computer implementing a virtual environment, the virtual environemnt supporting a first virtual object having an associated menu of available interactions with other virtual objects, at least some of said objects belonging to an object type, said object having dynamically changeable states, said menu being changeable dynamically in accordance with changes of available interactions with surrounding objects consequent upon said changes in state, said menu permitting a user to define for at least one surrounding object or at least one surrounding object type at least one default association position, such that the position of said first virtual object in relation to said surrounding object is defaultingly selected according to at least one of a group comprising the interaction selected, the first object, the first object type, the surrounding object the surrounding object type.

47. (Currently Amended) -A computer implementing a virtual object as claimed in claim 46, wherein said states are selected from appearance states, position states, and function states.